

INTERNATIONAL SEARCH REPORT

PCT/US2004/036436

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F16L19/065 F16L23/06 F16L23/08 F16L23/032

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/063194 A (SWAGELOK COMPANY; WILLIAMS, PETER, C) 15 August 2002 (2002-08-15)	1
Y	abstract; figures	2-33
Y	FR 2 697 893 A (GOAVEC SA) 13 May 1994 (1994-05-13)	2-6, 8-33
A	abstract; figures	1, 7
Y	CH 429 329 A (GUETTINGER & CO) 31 January 1967 (1967-01-31)	7
A	figures 2, 3	1-6, 8-33
A	DE 200 08 110 U1 (ARMATURENWERK HOETENSLEBEN GMBH) 18 January 2001 (2001-01-18) the whole document	1-33
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

22 February 2005

Date of mailing of the international search report

01/03/2005

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PCT/US2004/036436

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EP 1 302 714 A (KUELLER, GUENTER) 16 April 2003 (2003-04-16) abstract; figures</p> <p>-----</p>	1-33

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